Bossier Parish Community College
Master Syllabus

Course Prefix and Number: Math 114   **Credit Hours:**   3

Course Title: Finite Math

Course Prerequisites: A grade of "C" or higher in Math 102

Textbook: Lial, Hungerford, Holcomb. <u>Finite Mathematics with Applications</u>, 9th edition. Addison Wesley, 2007.

Course Description: A course that contains a wide variety of realistic applications for students majoring in the liberal arts, the social sciences, and business. Topics include the following: linear, quadratic, exponential, and logarithmic functions with applications; mathematics of finance; sets and probability; permutations, combinations and counting; statistics.

Learning Outcomes:
At the end of this course, the student will:
- A. use linear and quadratic function models to solve applications;
- B. use exponential and logarithmic function models to solve applications;
- C. solve problems related to finance;
- D. work with sets, Venn diagrams, and basic concepts of probability;
- E. apply basic counting principles to find probability;
- F. apply statistics.

To achieve the learning outcomes, the student will
(The letter designations at the end of each statement refer to the learning outcome(s).)

1. solve linear and quadratic equations; (A)
2. derive linear and quadratic functions models from application problems; (A)
3. solve exponential and logarithmic equations; (B)
4. derive exponential function models from application problems; (B)
5. solve simple and compound interest problems; (C)
6. solve problems dealing with annuities and amortization; (C)
7. perform operations on sets; (D)
8. create Venn diagrams to solve application problems; (D)
9. compute probability; (D), (E)
10. solve problems using the multiplication counting principle, permutations, or combinations; (E)
11. compile frequency distributions, measure of central tendency, measures of variation, and normal distribution. (F)

Course Requirements: A scientific (TI30XIIS recommended) or graphing calculator (TI83 Plus or TI84 recommended)

Course Grading Scale:

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Reviewed by: Frank Viviano   and date: August 1, 2007.